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THE HIGHEST QUALITY AVAILABLE

INITIAL JA DATE 3-26-05

This Track 1 Decision Document is marked "Draft" but is a final document signed by the agencies.

_____ Date 1/24/2005

DOE/ID-10894
August 2001

SITE 004 TRACK 1 DECISION DOCUMENTATION PACKAGE, OU 10-08

DECISION DOCUMENTATION PACKAGE
COVER SHEET

Prepared in accordance with

TRACK 1 SITES:
GUIDANCE FOR ASSESSING
LOW PROBABILITY HAZARD SITES
AT THE INEEL

Site Description: **Diesel-Saturated Dirt Pile Near Experimental Field Station**

Site ID: **004** **Operable Unit: 10-08**

Waste Area Group: 10

I. SUMMARY – Physical description of the site:

Site 004 is an earthen and gravel disposal pile, estimated to be 2-3 ft high, 4-5 ft wide, and 6-8 ft long. Site inspections conducted in 1994 and 1999 detected a diesel oil-type odor and dark discoloration was observed on the soil and underside of rocks. No vegetation is present on the pile. Site 004 is located approximately 50-65 feet southwest of the former Experimental Field Station Dairy Barn. The Experimental Field Station is located approximately one and one-half miles southeast of Lincoln Boulevard, three miles northeast of the Idaho Nuclear Technology Engineering Complex (INTEC).

This site was identified as a potential new waste site in 1994. In accordance with Management Control Procedure-3448, *Reporting or Disturbance of Suspected Inactive Waste Sites*, a new site identification form was completed for this site in 1995. As part of the process, a field team wrote a site description and collected photographs and global positioning system (GPS) coordinates of the site. The GPS coordinates are The GPS coordinate system is listed as North American Datum 27, Idaho East Zone, State Plane Coordinates. The new site identification process also included a search and review of existing historical documentation.

Site investigations revealed that the disposal pile likely resulted from a spill cleanup from an unknown origin suspected to have been dumped some time ago. On February 24, 1995, soil samples were collected for RCRA corrective action decision-making, to confirm the presence or absence of hazardous constituents. Samples were analyzed for Total Petroleum Hydrocarbons (TPH), polychlorinated biphenyls (PCBs), Toxicity Characteristic Leaching Procedure (TCLP) metals/semivolatile organic compounds (SVOCs) and TCLP volatile organic compounds (VOCs).

The data results indicated that TPH was detected in both primary and duplicate samples (29,000 mg/kg; 29000 mg/kg;) and the equipment rinsate (0.079 mg/L). The acceptable action level for TPH is 800 ppm. All TCLP VOCs, and TCLP metals/ SVOCs were found to be below acceptable regulatory levels (40 CFR 261.24, Table 1) or not detected. No PCBs were present in any of the samples.

DECISION RECOMMENDATION

II. SUMMARY - Qualitative Assessment of Risk:

Sample results indicate that TPH is present in the disposal pile above the acceptable action level of 800 ppm. There is no empirical, circumstantial, or other evidence of contaminant migration. The reliability of information provided in this report is high. Samples collected six years ago detected TPH at levels at more than thirty times the action limit. It is unlikely that over time the chemical composition would have significantly changed, as the exposure of the pile to weathering processes has been limited to the surface materials. Thus, the overall qualitative risk has not significantly changed since the initial sampling. Either additional characterization or a removal action is warranted. Based on the fact that the pile has not been disturbed since sampling, weathering and degradation of the petroleum would be minimal.

III. SUMMARY - Consequences of Error:

False negative error:
With the exception of TPH, the possibility of contamination levels at this site being above risk-based limits is remote. However, because current concentrations of TPH are unknown, this contaminant may still be present at elevated levels.

False positive error:
If further action were completed at a low risk site, funds expended could exceed the environmental benefit. However, based on existing sample data and process information, further sampling is needed to determine current risks at this site.

IV. SUMMARY - Other Decision Drivers:

There are no other decision drivers for this site.

Recommended Action:

It is recommended that this newly identified site continue under the Track 2 process to determine the extent and concentration of TPH that may be present. Field investigations, anecdotal information, and results of field sampling indicate a potential risk to human health and the environment, and as a precaution further investigation of this site is needed. It is unlikely that over time the chemical composition would have significantly changed, as the exposure of the pile to weathering processes has been limited to the surface materials. Thus, the overall qualitative risk has not significantly changed since the initial sampling. Because of this data gap, either characterization or a removal action is warranted.

Signatures: 9/23/04 for	**# Pages: 16**	**Date: August 1, 2001**
Prepared By: Marilyn Paarmann, WPI	**DOE WAG Manager:**	
Approved By: 9-30-04	**Independent Review:** 9-29-04	

DECISION STATEMENT (DOE RPM)	
Date Received: 1/14/05	
Disposition: Site 004 near INTEC will be re-characterized during 2005 field season. If hydro-carbon contamination is still present RBCA guidance will be used to determine action.	
Date: 1/14/05	# Pages: 1 of 1
Name: Kathleen Hain	Signature: Kathleen G Hain

Draft

DECISION STATEMENT (EPA RPM)	Site - 004
Date Received:	8

Disposition:

EPA recommends that this site be removed or land Farmed by DOE. TPH is not regulated under CERCLA therefore DOE should take this action under their own authority.

Date: 9-23-04	# Pages: 1
Name: Dennis Faulk	Signature: Dennis Faulk

DECISION STATEMENT
(IDEQ RPM)

Date Received: August 31, 2001

Disposition:

Site 004

Site 004 is earth and gravel disposal pile that was identified in 1994 and 1999 has having a diesel oil-type odor and dark discoloration. The disposal pile is located about 50 to 65 feet southwest of the former Experimental Field Station Dairy Barn and is about 3 miles northeast of INTEC. This disposal pile is thought to have originated from spill cleanup of unknown origin. Soil samples were collected in February 1995 for RCRA corrective action decision making. TPH was detected at 29,000 mg/kg in both the primary and duplicate samples. All VOCs, TCLP metals, and SVOCs were below regulatory levels. PCBs were not present in the samples.

The State recommends a Removal Action to eliminate the problem.

Date: August 16, 2004	**# Pages:** 1
Name: Daryl E. Koch	**Signature:** Daryl E Koch

Draft

PROCESS/WASTE WORKSHEET SITE ID: 004	PROCESS: Disposal pile WASTE: Earthen/gravel pile containing petroleum hydrocarbons	
Col 1 **Processes Associated With This Site**	**Col 2** **Waste Description & Handling Procedures**	**Col 3** **Description & Location of any Artifacts/Structures/Disposal Areas Associated with this Waste or Process**
Disposal pile containing petroleum hydrocarbons.	Site survey personnel determined that the disposal pile likely resulted from a spill cleanup from an unknown origin suspected to have been dumped some time ago.	**Artifact:** Disposal pile **Location:** Approximately 50-65 feet southwest of the former Experimental Field Station Dairy Barn. The Experimental Field Station is located approximately one and one-half miles southeast of Lincoln Boulevard, three miles northeast of the INTEC facility. **Description**: An earthen and gravel disposal pile, approximately 2-3 ft high, 4-5 ft wide, and 6-8 ft long. A diesel oil-type odor and dark discoloration were detected on the soil and underside of rocks. No vegetation is present on the pile.

CONTAMINANT WORKSHEET

SITE ID: 004

PROCESS: (Col 1) Disposal pile **WASTE: (Col 2) Earthen/gravel pile containing petroleum hydrocarbons**

Col 4 What Known/Potential Hazardous Substance/Constituents are Associated with this Waste or Process?	Col 5 Potential Sources Associated with this Hazardous Material	Col 6 Known/Estimated Concentration of Hazardous Substances/ Constituents	Col 7 Risk-based Concentration	Col 8 Qualitative Risk Assessment (hi/med/low)	Col 9 Overall Reliability (high/med/low)
Total Petroleum Hydrocarbons (TPH)	Soil	29000 mg/kg (29000 ppm)	800 ppm[b]	Med	High
TCLP volatile organic compounds (VOCs)	Soil	ND[a]	--[c]	Low	High
TCLP metals/semi-volatile organic compounds (SVOCs)	Soil	ND[a]	--[c]	Low	High
Polychlorinated biphenyls (PCBs)	Soil	ND[a]	--[c]	Low	High

a. All Toxicity Characteristic Leaching Procedure (TCLP) volatile organics compounds (VOCs), semi-VOCs (SVOCs), PCBs, and TCLP metals were found to be below the regulatory levels defined in 40 CFR 261.24, Table 1 or were not detected (ND). (See attached Closure Report for the Sampling of Disposal Piles; EMS-115-94 – RSR-51-95).

b. Track 1 Sites: Guidance for Assessing Low Probability Sites at the INEL; California LUFT Field Manual

c. 40 CFR 261.24, Table 1

Question 1. What are the waste generation processes, locations, and dates of operation associated with this site?

Block 1 Answer:

Site 004 consists of an earthen and gravel disposal pile, estimated to be 2-3 ft high, 4-5 ft wide, and 6-8 ft long. Site inspections conducted in 1994 and 1999 detected a diesel oil-type odor and dark discoloration was observed on the soil and underside of rocks. No vegetation is present on the pile. Site 004 is located approximately 50-65 feet southwest of the former Experimental Field Station Dairy Barn. The Experimental Field Station is located approximately one and one-half miles southeast of Lincoln Boulevard, three miles northeast of the INTEC facility.

Anecdotal evidence supplied by site survey personnel suggested that the disposal pile resulted from a spill cleanup from an unknown origin. It is suspected to have been dumped some time ago, but did not likely originate from Experimental Field Station activities.

Block 2 How reliable are the information sources? X High _Med _Low (check one)
Explain the reasoning behind this evaluation.

INEEL Environmental Restoration Environment Safety and Health (ER ES&H), Environmental Baseline Assessment, and ER sampling personnel investigated the site and described the condition and suspected origin of the disposal pile.

Block 3 Has this INFORMATION been confirmed? X Yes _No (check one)
If so, describe the confirmation.

Site investigations were conducted by ER ES&H personnel during an environmental assessment in 1994 and new site investigation in 1999; the site was sampled in 1995; aerial surveys and photographs confirm the presence and condition of the disposal pile.

Block 4 Sources of Information [check appropriate box(es) & source number from reference list]

No available information	[ ]	**Analytical data**	[X] 6
Anecdotal	[X] 3,8	**Documentation about data**	[X] 7,8
Historical process data	[ ]	**Disposal data**	[ ]
Current process data	[ ]	**Q.A. data**	[ ]
Photographs	[X] 4	**Safety analysis report**	[ ]
Engineering/site drawings	[ ]	**D&D report**	[ ]
Unusual Occurrence Report	[ ]	**Initial assessment**	[X] 5,9
Summary documents	[ ]	**Well data**	[ ]
Facility SOPs	[ ]	**Construction data**	[ ]
OTHER	[ ]		

Question 2. What are the disposal processes, locations, and dates of operation associated with this site? How was the waste disposed?

Block 1 Answer:

Site 004 consists of an earthen and gravel disposal pile, approximately 2-3 ft high, 4-5 ft wide, and 6-8 ft long. Site inspections conducted in 1994 and 1999 detected a diesel oil-type odor and dark discoloration was observed on the soil and underside of rocks. No vegetation is present on the pile. Site 004 is located approximately 50-65 feet southwest of the former Experimental Field Station Dairy Barn. The Experimental Field Station is located approximately one and one-half miles southeast of Lincoln Boulevard, three miles northeast of the INTEC facility.

Anecdotal evidence supplied by site survey personnel suggested that the disposal pile resulted from a spill cleanup from an unknown origin. It is suspected to have been dumped some time ago, but did not likely originate from Experimental Field Station activities.

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Explain the reasoning behind this evaluation.

INEEL Environmental Restoration Environment Safety and Health (ER ES&H), Environmental Baseline Assessment, and ER sampling personnel investigated the site and described the condition and suspected origin of the disposal pile.

Block 3 Has this INFORMATION been confirmed? X_Yes _No (check one)
If so, describe the confirmation.

Site investigations were conducted by ER ES&H personnel during an environmental assessment in 1994 and new site investigation in 1999; the site was sampled in 1995; aerial surveys and photographs confirm the presence and condition of the disposal pile.

Block 4 Sources of Information [check appropriate box(es) & source number from reference list]

No available information	[ ]	**Analytical data**	[X] 6
Anecdotal	[X] 3,8	**Documentation about data**	[X] 7,8
Historical process data	[ ]	**Disposal data**	[ ]
Current process data	[ ]	**Q.A. data**	[ ]
Photographs	[X] 4	**Safety analysis report**	[ ]
Engineering/site drawings	[ ]	**D&D report**	[ ]
Unusual Occurrence Report	[ ]	**Initial assessment**	[X] 5,9
Summary documents	[ ]	**Well data**	[ ]
Facility SOPs	[ ]	**Construction data**	[ ]
OTHER	[ ]		

Question 3. Is there evidence that a source exists at this site? If so, list the sources and describe the evidence.

Block 1 Answer:

There is evidence that a source for TPH exists at Site 004. Soil samples collected at this site in February 1995 revealed that TPH was present in both soil samples and the rinsate (29,000 mg/kg; 29,000 mg/kg, and 0.79 mg/L, respectively). The acceptable action level for TPH is 800 ppm.

The sample logbook recorded that the soiled areas were obvious and the samples were biased towards them. The soil samples were collected from surface soil until adequate sample volume was attained. It was noted that the soil had a definite petroleum-creosote odor and contained 5% small pebbles (gravel). A few chunks of metal were found but not included in samples.

Results of the data analyses reported that all other analytes were either non detect or below acceptable regulatory limits.

Block 2 How reliable are the information sources? X High _Med _Low (check one)
Explain the reasoning behind this evaluation.

Sample results verify that a source for TPH is present at this site.

Block 3 Has this information been confirmed? X Yes _No (check one)
If so, describe the confirmation.

Sample logbook confirms site condition and sample collection information; sample analyses confirm TPH detected in disposal pile.

Block 4 Sources of Information [check appropriate box(es) & source number from reference list]

No available information	**[ ]**	**Analytical data**	**[X] 6**
Anecdotal	**[X] 3**	**Documentation about data**	**[X] 7,8**
Historical process data	**[ ]**	**Disposal data**	**[ ]**
Current process data	**[ ]**	**Q.A. data**	**[ ]**
Photographs	**[ ]**	**Safety analysis report**	**[ ]**
Engineering/site drawings	**[ ]**	**D&D report**	**[ ]**
Unusual Occurrence Report	**[ ]**	**Initial assessment**	**[X] 5,9**
Summary documents	**[ ]**	**Well data**	**[ ]**
Facility SOPs	**[ ]**	**Construction data**	**[ ]**
OTHER	**[ ]**		

Question 4. Is there empirical, circumstantial, or other evidence of migration? If so, what is it?

Block 1 Answer:

There is no visual evidence of migration beyond the parameters of the disposal pile.

Biased soil samples were collected on the upper surface of the disposal pile in the most heavily stained areas; however, no samples were collected in the soil beneath the disposal pile.

Block 2 How reliable are the information sources? X High _Med _Low (check one)
Explain the reasoning behind this evaluation.

Visual site inspections and a photograph of the site show that vegetation surrounding the disposal pile is well established, and no staining is evident beyond the parameters of the disposal pile.

Block 3 Has this information been confirmed? X Yes _No (check one)
If so, describe the confirmation.

Site inspections revealed no visual evidence of migration.

Block 4 Sources of Information [check appropriate box(es) & source number from reference list]

No available information	[ ]		**Analytical data**	[X] 6
Anecdotal	[ ]		**Documentation about data**	[X] 7,8
Historical process data	[ ]		**Disposal data**	[ ]
Current process data	[ ]		**Q.A. data**	[ ]
Photographs	[X]	4	**Safety analysis report**	[ ]
Engineering/site drawings	[ ]		**D&D report**	[ ]
Unusual Occurrence Report	[ ]		**Initial assessment**	[X] 5,9
Summary documents	[ ]		**Well data**	[ ]
Facility SOPs	[ ]		**Construction data**	[ ]
OTHER	[ ]			

Question 5. Does site operating or disposal historical information allow estimation of the pattern of potential contamination? If the pattern is expected to be a scattering of hot spots, what is the expected minimum size of a significant hot spot?

Block 1 Answer:

The pattern of contamination for TPH is expected to be heterogeneous throughout the disposal pile. The sample logbook reported that some areas of the disposal pile were more heavily stained than others. Data results for other analytes (TCLP VOCs, TCLP metals/SVOCs, and PCBs) were either non-detects or below acceptable regulatory limits.

Block 2 How reliable are the information sources? _High X Med _Low (check one) Explain the reasoning behind this evaluation.

This estimate was derived from the information contained in the sample logbook, data analyses, and visual appearance of the disposal pile observed during the site investigations.

Block 3 Has this information been confirmed? X Yes __No (check one)
If so, describe the confirmation.

Sample logbook, site investigation documentation, and a photograph of the site provide information for this estimate.

Block 4 Sources of Information [check appropriate box(es) & source number from reference list]

No available information	[ ]	Analytical data	[X] 6
Anecdotal	[ ]	Documentation about data	[X] 7,8
Historical process data	[ ]	Disposal data	[ ]
Current process data	[ ]	Q.A. data	[ ]
Photographs	[X] 4	Safety analysis report	[ ]
Engineering/site drawings	[ ]	D&D report	[ ]
Unusual Occurrence Report	[ ]	Initial assessment	[X] 5,9
Summary documents	[ ]	Well data	[ ]
Facility SOPs	[ ]	Construction data	[ ]
OTHER	[X] 1,2		

Question 6. Estimate the length, width, and depth of the contaminated region. What is the known or estimated volume of the source? If this is an estimated volume, explain carefully how the estimate was derived.

Block 1 Answer:

Site investigations estimated the disposal pile dimensions to be 4-5 ft wide by 6-8 ft long by 2-3 ft high. The source volume is estimated at:

5 ft x 8 ft x 3 ft = 120 ft/27 = 4.44 cubic yds of soil potentially contaminated with petroleum hydrocarbons.

Because the petroleum hydrocarbons are believed to be heterogeneously mixed throughout the disposal pile, the estimated volume of the source for TPH-contaminated soil is estimated at 4.5 cubic yds; however, no estimate was made for potential soil contamination beneath the disposal pile.

The estimated volume of the source for other analytes is near zero. Data analysis revealed that all analytes, excluding TPH, were non detects or below acceptable regulatory limits.

Block 2 How reliable are the information sources? _High X Med _Low (check one)
Explain the reasoning behind this evaluation.

This evaluation was based on field investigations, sample logbook, and data analyses.

Block 3 Has this INFORMATION been confirmed? __Yes X No (check one)
If so, describe the confirmation.

Estimated volume of TPH is based on sample results and the Track 1 Guidance Document.

Block 4 Sources of Information [check appropriate box(es) & source number from reference list]

No available information	[ ]	**Analytical data**	[X] 6
Anecdotal	[ ]	**Documentation about data**	[X] 7,8
Historical process data	[ ]	**Disposal data**	[ ]
Current process data	[ ]	**Q.A. data**	[ ]
Photographs	[ ]	**Safety analysis report**	[ ]
Engineering/site drawings	[ ]	**D&D report**	[ ]
Unusual Occurrence Report	[ ]	**Initial assessment**	[X] 5,9
Summary documents	[ ]	**Well data**	[ ]
Facility SOPs	[ ]	**Construction data**	[ ]
OTHER	[X] 1		

Question 7. What is the known or estimated quantity of hazardous substance/constituent at this source? If the quantity is an estimate, explain carefully how the estimate was derived.

Block 1 Answer:

The estimated volume of soil contaminated with TPH is 4.5 cubic yds. No estimate was made for potential soil contamination beneath the disposal pile. Two soil samples detected TPH (29,000 mg/kg; 29,000 mg/kg), significantly above the action limit of 800 ppm The estimated quantity of other hazardous constituents at this site is near zero. Data analysis for other analytes revealed that they were either not detected or were below acceptable regulatory levels.

Block 2 How reliable are the information sources? _High X_ Med _Low (check one)
Explain the reasoning behind this evaluation.

The estimate is based on total volume of TPH-contaminated soil that could be present given the dimensions of the disposal pile. No estimate was made for potential soil contamination beneath the disposal pile.

Block 3 Has this INFORMATION been confirmed? X Yes __ No (check one)
If so, describe the confirmation.

Data analyses confirm the concentration of TPH and other analytes.

Block 4 Sources of Information [check appropriate box(es) & source number from reference list]

No available information	[ ]	**Analytical data**	[X] 6
Anecdotal	[ ]	**Documentation about data**	[X] 7,8
Historical process data	[ ]	**Disposal data**	[ ]
Current process data	[ ]	**Q.A. data**	[ ]
Photographs	[X] 4	**Safety analysis report**	[ ]
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Unusual Occurrence Report	[ ]	**Initial assessment**	[ ]
Summary documents	[ ]	**Well data**	[ ]
Facility SOPs	[ ]	**Construction data**	[ ]
OTHER	[X] 1		

Question 8. Is there evidence that this hazardous substance/constituent is present at the source as it exists today? If so, describe the evidence.

Block 1 Answer:

Samples were collected at this site in 1995 and analyzed for TPH, PCBs, TLCP VOCs, and TCLP metals/SVOCs. Data analysis revealed TPH present above the acceptable action limit of 800 ppm. It is unlikely that over time the chemical composition would have significantly changed, as the exposure of the pile to weathering processes has been limited to the surface materials. Thus, the overall qualitative risk has not significantly changed since the initial sampling. Based on the fact that the pile has not been disturbed since sampling, weathering and degradation of the petroleum would be minimal.

Block 2 How reliable are the information sources? _High X Med _Low (check one)
Explain the reasoning behind this evaluation.

This evaluation is based on sample analysis, anecdotal information, site visitations, and photographs of the disposal pile. Vegetation adjacent to the disposal pile appears to be well established.

Block 3 Has this INFORMATION been confirmed? _Yes X No (check one)
If so, describe the confirmation.

Block 4 Sources of Information [check appropriate box(es) & source number from reference list]

No available information	[ ]	Analytical data	[X] 6
Anecdotal	[ ]	Documentation about data	[X] 7,8
Historical process data	[ ]	Disposal data	[ ]
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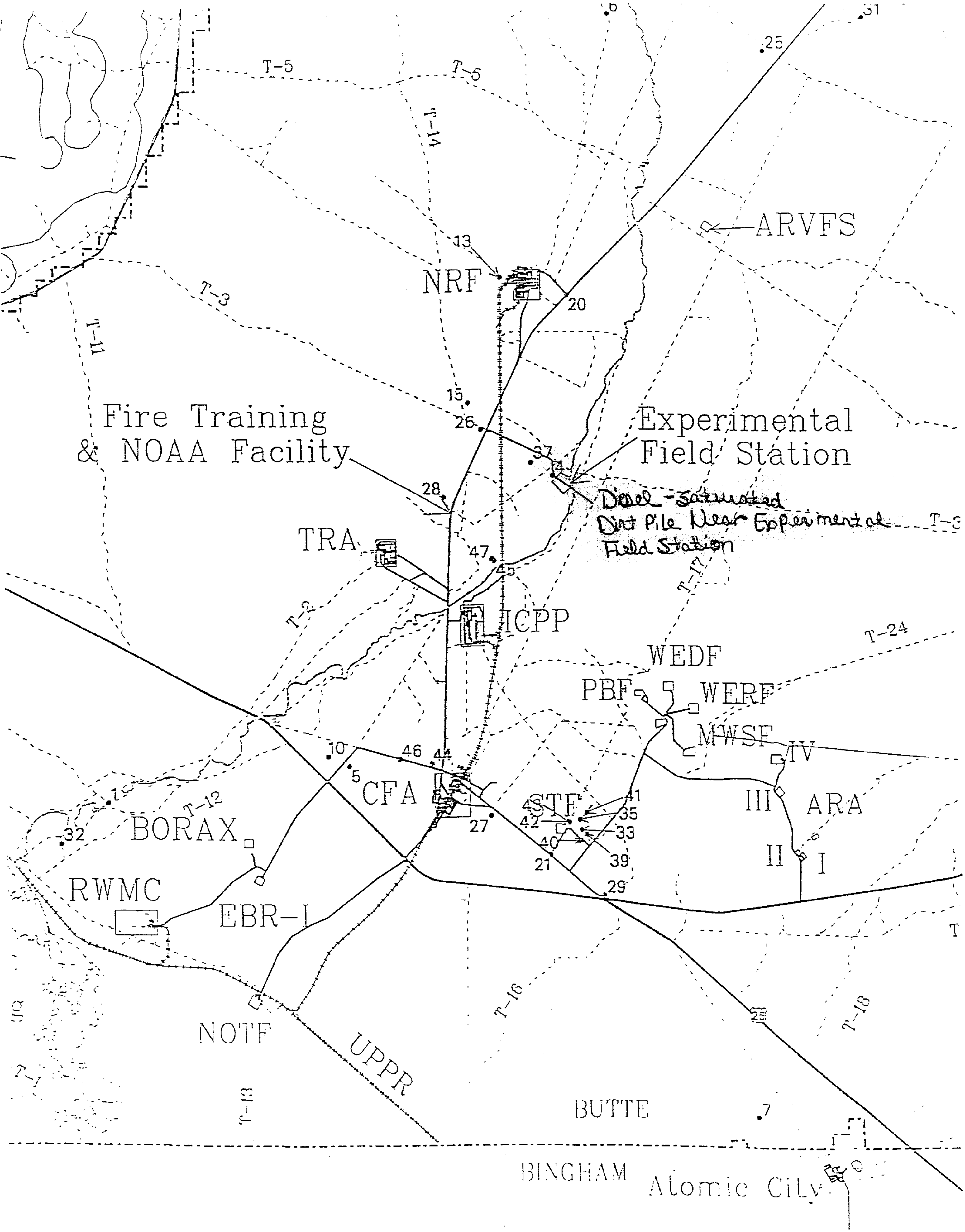
Unusual Occurrence Report	[ ]	Initial assessment	[X] 5,9
Summary documents	[ ]	Well data	[ ]
Facility SOPs	[ ]	Construction data	[ ]
OTHER	[X] 1		

REFERENCES

1. DOE, 1992, Track 1 Sites: Guidance for Assessing Low Probability Sites at the INEL, DOE/ID-10390 (92), Revision 1, U.S. Department of Energy, Idaho Falls, Idaho, July.
2. California Leaking Underground Fuel Tank (LUFT) Field Manual, May 1988.
3. Field Notes #16 from Environmental Baseline Assessment team members, July 1994.
4. Photograph of Site #004: PN94-0856-1-32A.
5. FY1999 WAG 10 Newly Identified Sites, Volumes I and II.
6. Data analysis - Closure Report for the Sampling of Disposal Piles, RSR-51-95, April 20, 1995.
7. Sample logbook for Project EMS-115-94, February 24, 1995.
8. Abbreviated Sampling and Analysis Plan for Sampling Disposal Piles – EMS-115-94, December 5, 1994.
9. New Site Identification Form, September 6, 1994.
10. 40 CFR 261.24, Table 1.


T-5
T-5
T-14
T-3
T-11
NRF
ARVFS
Fire Training
& NOAA Facility
Experimental
Field Station
Diesel-Saturated
Dirt Pile Near Experimental
Field Station
TRA
ICPP
T-2
T-17
T-24
WEDF
PBF
WERF
MWSF
IV
III
ARA
II
I
CFA
STF
BORAX
T-12
RWMC
EBR-I
NOTF
UPPR
T-16
T-18
T-13
T-1
BUTTE
BINGHAM
Atomic City

Draft

Attachment A

Photograph of Site #004

Site: 004 Diesel-saturated Dirt Pile Near Experimental Field Station
(PN94-0856-1-32A)

Draft

Attachment B

Supporting Information for Site #004

435.36
04/14/99
Rev. 03

NEW SITE IDENTIFICATION

Part A – To Be Completed By Observer

1. Person Initiating Report: Jacob Harris	Phone: 526-1877
Contractor WAG Manager: Douglas Burns	Phone: 526-4324

2. Site Title: 004, Diesel-saturated Dirt Pile Near Experimental Field Station

3. Describe the conditions that indicate a possible inactive or unreported waste site. Include location and description of suspicious condition, amount or extent of condition and date observed. A location map and/or diagram identifying the site against controlled survey points or global positioning system descriptors shall be included to help with the site visit. Include any known common names or location descriptors for the waste site.

There is a stained pile of dirt and gravel approximately 50-65 feet southwest of the Experimental Field Station dairy barn. The pile is 2-3 feet high, 4-5 feet wide, and 6-8 feet long. During the July 1999 site visit, a diesel oil type odor was detected and discoloration was observed on the soil and under side of rocks. No vegetation was on the pile. The GPS coordinates of the site are . The reference number for this site is 004 and can be found on the summary map as provided.

Part B – To Be Completed By Contractor WAG Manager

4. Recommendation:

☒ This site meets the requirements for an inactive waste site, requires investigation, and should be included in the INEEL FFA/CO Action Plan. Proposed Operable Unit assignment is recommended to be included in the FFA/CO.
WAG: Operable Unit:

☐ This site DOES NOT meet the requirements for an inactive waste site, DOES NOT require investigation and SHOULD NOT be included in the INEEL FFA/CO Action Plan.

5. Basis for the recommendation:

The conditions that exist at this site indicate the potential for an inactive waste site according to Section 2 of MCP-3448 Reporting or Disturbance of Suspected Inactive Waste Sites.

The basis for recommendation must include: (1) source description; (2) exposure pathways; (3) potential contaminants of concern; and (4) descriptions of interfaces with other programs, as applicable (e.g., D&D, Facility Operations, etc.)

6. Contractor WAG Manager Certification: I have examined the proposed site and the information submitted in this document and believe the information to be true, accurate, and complete. My recommendation is indicated in Section 4 above.

Name: _____ Signature: _____ Date: _____

- T3N, R30E, Sec. 7 - Dry explosives (reported to be TNT) and ordnance in the area referred to as NOAA Grid 3.

- T3N, R30E, Sec. 7 - The Fire Training Facility asphalt pad covering an area reported during interviews to have had many different types of materials (and chemicals) historically dumped on the ground and burned during training exercises--a practice stopped a number of years ago. Interviews also indicate that this area was not completely remediated prior to being covered with asphalt. #04

- T3N, R30E, Sec. 8 - A dirt pile with a strong diesel odor of what appears to have been a spill cleanup from an unknown origin (suspected to have been dumped some time ago). This site is located across the road from the southwest corner of the main building at the Experimental Field Station. (Reference Photograph 28)

- T3N, R30E, Sec. 8 - Igloo type structures reported to have been old Navy ordnance storage structures (contents, if any, unknown). This site is located northwest of the Field Experimental Station.

- T3N, R30E, Sec. 13 - Five ordnance located east of TRA, between the old Monroe road and the Power line road. All five appear to still contain explosives (suspected TNT).

- T3N, R30E, Sec. 17 - Suspected military cache. This is a partially buried large, circular, metal structure (size can be compared to a 30,000 gallon tank with no top) containing evidence of burning. Scorched vegetation, partially burned tires, and tire bands left after burning remain in the structure. Interviews with EG&G Idaho ordnance experts indicate that this structure appears to be the type of structure used by the military for disposing of ordnance and chemicals. This structure is located south of the Experimental Field Station, between (and to the west) of the last two of six Navy revetments in the area, and west of the old two-wheel track. (Reference Photograph 32)

- T3N, R30, Sec. 13 - Ordnance containing dry explosives located north of the old Monroe Road, south of the power line, and east of TRA.

- T3N, R30E, Sec. 17 - Burned area east of the Fire Training Facility asphalt pad (south end). Interviews indicate that this burned area was caused by one of numerous training burns that took place here years ago. This area is reported to have been an old wooden structure containing no hazardous materials.

- T3N, R30E, Sec. 17 - Buried and partially buried large gas cylinders (contents unknown, however, suspected hydrogen) located north of ICPP on a two-wheel dirt track that leads to the New Production Reactor site. This area was roped off and signed "Keep Out, Authorized Personnel Only." Interviews indicate that this cylinders are suspected to contain hydrogen. (Reference Photograph 37)

- T3N, R30E, Sec. 17 - Fenced area of what appears to be an old ecological study area. The EBS team observed many of these areas across the INEL and was careful not to impact them. The Center for Integrated Environmental Technologies tracks these sites, called Long-term Vegetation Transects, and has maps and data reflecting study data since the late 1950s. No potentially significant environmental conditions associated with this site were noted.

Agreements

There are currently no CERCLA or RCRA drivers for cleanup of INEL trash sites.

The most inexpensive organization for cleanup of INEL trash sites is through Facilities, Utilities, and Maintenance (FUM). A precedent was set for this during the DOE-ID directed "farmer dump site cleanup" on the INEL northeast border.

There is currently no budget to fund cleanup of INEL trash sites.

ER will fund and coordinate sampling and analysis for PCBs of four dirt roads with stained soils between:

1. Highway 20 and East Butte
2. Portland and STF
3. Lincoln and NRF (north of the turnoff)
4. Fire Training Center Road

RCRA Corrective Action will fund and coordinate sampling and analysis of:

1. The diesel contaminated soil pile near the Experimental Field Station.
2. Transite-like material near TRA and in canal near Guard Gate 3.
3. A small pile of black sand (appears to be sandblasting grit) near a shallow injection well just west of PBF.
4. Representative types of trash (including metal cans, other metals, glass, etc.) from priority sites. **NOTE: This sampling is dependent upon Environmental Monitoring's recommendations on how to obtain a representative sample from these sites and cost estimates.**

RCRA Corrective Action will also check into the INEL Landfill WAC for acceptance/date requirements for disposal of diesel contaminated soil, trash, and sandblasting grit.

Copies of sampling results will be on file in the WAG 10 New Site identification file and will be forwarded to Ron Dixon (Road and Grounds) for his use in preparation of cleanup work packages.

Roads and Grounds will prepare work packages and cost estimates to support a funding request to their DOE-ID counterpart for cleanup of INEL Trash sites. Assistance will be provided by ER and RCRA Corrective Action as needed.

ER will work with Safety to develop procedures and support for ordnance sweeps.

MSG FROM: YHO --INELUM1 TO: SOO --INELUM1 02/24/95 15:01:53
To: SOO --INELUM1 S M Burns
cc: YHO --INELUM1 D F Haney RR6 --INELUM1 R Rice

FROM: DONNA F HANEY
Subject: EMS-115-94

FYI: The top of the pile had dried enough to locate stained areas; however, roadways are still pretty nasty, lots of standing water and muddy, so it'll be a little longer before we attempt the roadway sampling that Doucette requested. Thanks!

*** Forwarding note from YHO --INELUM1 02/24/95 15:00 ***
To: WJB --INELUM1 W J Becker
cc: SOO --INELUM1 S M Burns YHO --INELUM1 D F Haney
RR6 --INELUM1 R Rice

FROM: DONNA F HANEY
Subject: EMS-115-94

Bill: It finally got nice enough that we could get your jobs at PBF and the Experimental Field Station done today. Everything went according to plan and all samples were collected, including QC. Samples will arrive at the laboratory tomorrow. Results should be back within 10 to 15 working days and at that time, the data will be forwarded to the SMO for validation. Validation usually takes 3 to 4 weeks. If you need a peek at the data before it's validated, give us a call and we'll get it to you. Thanks and have a nice weekend!

EMS-115-94 F
MSG FROM: GLK --INELUM1 TO: SOO --INELUM1 02/27/95 15:06:38
To: WJB --INELUM1 W J Becker RLD --INELUM1 R L Dixon
cc: PKR --INELUM1 R D Parker BXR --INELUM1 B L Ringe
SOO --INELUM1 S M Burns MOEWL --INELUM1

FROM: GAIL LEWIS-KIDD
Environmental Engineer
MS 4112 526-6349 Fax 526-2688
Subject: Transite At the Guard Gate 3 Dump Site
Our IH, Bob Parker, confirmed that there is transite at the Guard Gate 3 dump. Most of it is concentrated in a location about 1/4 mile from the guard gate. There are a few more individual sheets farther west in the canal. Since it appears that some of the cans would need to be moved before the transite could be retrieved, it would be best if Brenda Ringe could complete her site investigation for cultural resources before the transite is removed by asbestos trained workers.

Bill, would you please give Bob Parker a charge number for one hour to cover his time today? His OU ID is PKR. Thanks

Ron, are you agreeable to giving Brenda a charge number for the work (field evaluation, taking photographs, mapping, and report writing) she needs to do to document the site? She estimates it will take 16 hours to complete the package, which will then need to be submitted to the SHPO. If the weather holds, Brenda should be able to do field work next week, because the snow is all but gone in the canal today - it is a bit muddy still. Please let Brenda know. Thanks.

Bill, as I understand it, after the cultural resource clearance is addressed you are willing to pay for the cleanup and disposal of the transite. You would

Lockheed
Idaho Technologies Company

INTERDEPARTMENTAL COMMUNICATION

Date: April 20, 1995

To: W. J. Becker, MS 3552

From: R. S. Rice, MS 4110

Subject: CLOSURE REPORT FOR THE SAMPLING OF DISPOSAL PILES; EMS-115-94 - RSR-51-95

Attached is a copy of the data from Analytical Technologies, Inc. (ATI), the logbooks, and the Limitations and Validation (L&V) report for the sampling of disposal piles on the Idaho National Engineering Laboratory (INEL).

On February 24, 1995, samples were collected from two disposal piles located on the INEL. One pile is located near the Power Burst Facility (PBF) and the other is located at the Experimental Field Station (EFS). The samples were collected and analyzed according to the Abbreviated Sample and Analysis Plan for Sampling of Disposal Piles; EMS-115-94. The samples were shipped to ATI under full chain of custody.

Site 004

EFS DISPOSAL PILE

The results of the total petroleum hydrocarbon (TPH) analysis are found in the following table.

SAMPLE ID	TPH CONCENTRATION
11594011TP (regular)	29000 mg/kg
11594012TP (duplicate)	29000 mg/kg
11594021TP (equip. rinsate)	0.079 mg/L

All TCLP volatile organics compounds (VOCs) and semi-VOCs (SVOCs) were found to be below the regulatory levels defined in 40 CFR 261.24, Table 1, or were not detected. As noted in the Case Narrative, the water samples were inadvertently not analyzed for TCLP VOCs. The error was not identified until the holding times were missed. When the lab notified me of the error, I told them not to run the TCLP VOCs because the samples were past the holding times and they were only a rinsate sample and a trip blank sample.

A review of the data indicates there are no PCBs present in the disposal pile.

Site 004

The results of the TCLP metals data indicates that all TCLP metals were below the regulatory levels found 40 CFR 261.24, Table 1, or were not detected.

PBF DISPOSAL PILE

The results of the total metals data are found in the following table.

ANALYTE	SAMPLE 11594041XM CONCENTRATION (mg/kg)	SAMPLE 11594042XM CONCENTRATION (mg/kg)
ARSENIC	26	30
BARIUM	390	330
CADMIUM	6.2	4.8
CHROMIUM	240	190
LEAD	2100	1500
MERCURY	ND	ND
SELENIUM	ND	ND
SILVER	2	2

ND = Not Detected

If the data is to be used for disposal of the material, the total metals values can be converted to equivalent maximum extract concentrations (see attached letter, SJS-16-90). A "worst-case" conversion of TCLP-equivalent units of mg/L is made as follows:

$$\text{Maximum extract concentration (mg/L)} = \frac{(\text{concentration, mg/kg}) \times S}{L}$$

where mg/kg = analyte result from total analysis
S = amount in kg of solid sample used in the TCLP extraction (0.1 kg for metals/SVOA, 0.025 kg for VOA)
and L = volume of leachate (Liters) used in the TCLP extraction (20 times the solid weight, i.e., 2 L for metals/SVOA, 0.5 L for VOA)

TOTAL PETROLEUM HYDROCARBONS BY IR
Method 418.1

Lab Name: Analytical Technologies, Inc.

Client Name: Lockheed Idaho Tech. Company

Client Project ID: EMS-115-94

Lab Workorder Number: 95-02-167

Date Collected: 02/24/95

Date Extracted: 03/03/95

Date Analyzed: 03/03/95

Sample Matrix: Soil

Sample ID	Lab Sample ID	Final Volume (mL)	TPH (mg/kg)	Detection Limit (mg/kg)
Reagent Blank	SRB1 03/03/95	40	ND	10
11594011TP	95-02-167-01	4000	29000	1000
11594012TP	95-02-167-05	4000	29000	1000

ND=Not detected at or above the client requested detection limit.

TOTAL PETROLEUM HYDROCARBONS BY IR

Method 418.1

Lab Name: Analytical Technologies, Inc.

Client Name: Lockheed Idaho Tech. Company

Client Project ID: EMS-115-94

Laboratory Workorder: 95-02-167

Initial Volume: 500mL

Date Collected: 02/24/95

Date Extracted: 03/01/95

Date Analyzed: 03/03/95

Sample Matrix: Water

Sample ID	Lab Sample ID	Final Volume (mL)	TPH (mg/L)	Detection Limit (mg/L)
Reagent Blank	WRB1 03/01/95	25	ND	0.050
11594021TP	95-02-167-09	25	0.079	0.050

ND-Not detected at or above the clients requested detection limits.

TCLP METALS

Sample ID

11594012TR

Lab Name: Analytical Technologies, Inc.

Client Name: Lockheed Idaho Tech. Company

Date Collected: 02/24/95

Client Project ID: EMS-115-94

Prep Date: 03/07/95

Lab Sample ID: 95-02-167-08

Date Analyzed: 03/07,13/95

Sample Matrix: TCLP Leachate Fl. #1

EPA HW Number	CAS Number	Analyte	Modified Method	Concentration (mg/L)	Detection Limit (mg/L)
D004	7440-38-2	Arsenic	6010	ND	0.06
D005	7440-39-3	Barium	6010	1.8	0.9
D006	7440-43-9	Cadmium	6010	0.005	0.005
D007	7440-47-3	Chromium	6010	ND	0.01
D008	7439-92-1	Lead	6010	ND	0.05
D009	7439-97-6	Mercury	7470	ND	0.002
D010	7782-49-2	Selenium	6010	ND	0.1
D011	7440-22-4	Silver	6010	ND	0.01

ND = Not Detected

TPH BY IR - MATRIX SPIKE
Method 418.1

Lab Name: Analytical Technologies, Inc. Date Extracted: 03/03/95

Client Name: Lockheed Idaho Tech. Compan Date Analyzed: 03/03/95

Lab Sample ID: 95-02-167-01 Sample Matrix: Soil

Sample ID	Spike Added (mg/kg)	Sample Concentration (mg/kg)	MS Concentration (mg/kg)	MS Percent Recovery
11594011TP	100	29000	29000	*

*Qualifier: Sample was spiked without previous knowledge of the extractable hydrocarbon concentration. The spiking level was not high enough to allow accurate determination of the matrix spike recovery due to the significant concentration of extractable hydrocarbons in the sample. Matrix spike recovery from a spiked reference matrix was satisfactory (see Blank Spike Results).

MISCELLANEOUS SAMPLE LOGBOOK

PROJECT: EMS-115-94 COC#: 0945

DATE (MM/DD/YY): 2/24/95

SAMPLERS: R. Rice / D. Haney

LOCATION: Experimental Field Station

REQUESTER: Bill Becker

	SAMPLE ID #	TIME	ANALYSIS	CONTAINER	LOT #	PRESERV.	
reg.	11594011TP	1226	TPH	125mL WMG	G4339050	4°C	Site 1
	11594011PC	1225	PCBs	↓	G4339050	↓	EBB
	11594011TV	1205	TCLP VOCs	500mL WMG	E4189010		
	11594011TR	1220	TCLP SVOCs/metals	2x500mL WMG	E4189010		
Dup.	11594012TP	1226	TPH	125mL WMG	G4339050		
	11594012PC	1225	PCBs	↓ 2/24/95 DH	G4339050		
	11594012TV	1205	TCLP VOCs	500 mL WMG ~~500 mL WMG~~	E4189010		
	11594012TR	1220	TCLP SVOCs/metals	2x500 mL WMG ~~2x500 mL WMG~~ 2/24/95 DH	E4189010	↓	
equip.	11594021TP	1255	TPH / 1L Amber	2/24/95 DH ~~125 mL WMG~~	H4319080	HCL pH<2	
rinsate	11594021PC	1250	PCBs	3, 1L Amber 2/24/95 DH	H4319080	4°C ↓	↓

continued on page 195

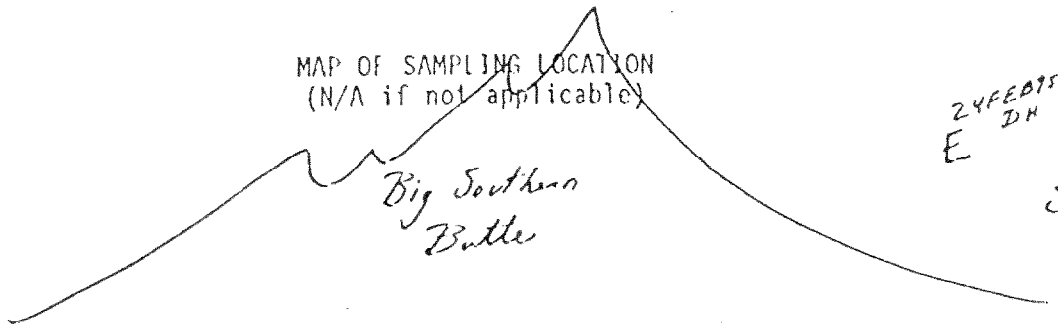
SAMPLE MATRIX

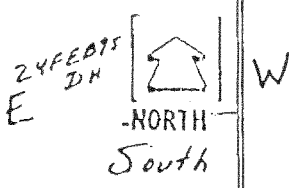
SOLID (X) LIQUID (__) SEDIMENT/SLUDGE (__)

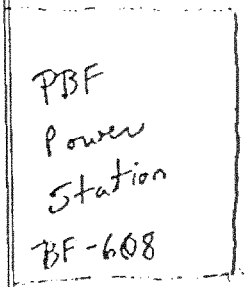
Narrative description of the sampling event including any deviations from the sampling plan:

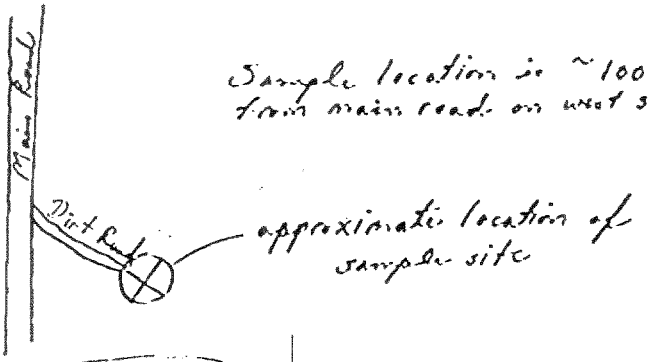
0845 - Arrive at site #2. Hold prejob, don PPE. The material is black, sandy, almost basaltic grit, fairly loose in top 1/8" but quite hard just under 1/8". A representative area was selected in the center of the ~9 x 12' area. The material also has a "crystal" look. This site only requires analysis for total metals per requester. There appear to be some small yellow paint chips on the grit. The hardness below 1/8" is due to the weather, as far as we can tell. A stainless steel spoon is used to collect and composite material. After 4" adequate volume has been attained, so samples are collected after mixing. Bottom depth of material was not determined, but we sampled from the expected high point. Go to 195.

MAP OF SAMPLING LOCATION
(N/A if not applicable)









Sample location is ~100' from main road on west side & ~3' from dirt road on west side

Not to scale

PER-768
Water Tank

Site # 2, sample location

RECORDED BY: [signature]

READ AND UNDERSTOOD BY: [signature]

MISCELLANEOUS SAMPLE LOGBOOK

PROJECT: EMS-115-94

COC#: 0945

DATE (MM/DD/YY): 2/24/95

SAMPLERS: R. Rice / D. Haney

LOCATION: Exp. Field St. / PBF

REQUESTER: Bill Becker

SAMPLE ID #	TIME	ANALYSIS	CONTAINER	LOT #	PRESERV.	
continued from page 193			2, 40 mL vials			
11594021TV	1242	TCLP VOCs	~~500 mL WMG~~ 24FEB95 DH	~~B4249020~~	4°C	Site 1 EDFS
11594021TR	1246	TCLP SVOCs/metals	4, 1 L Amber ~~2×500 mL WMG~~ 24FEB95 DH	H4319080	↓	↓
11594031TV	1238	TCLP VOCs	2×40 mL vial ~~500 mL WMG~~ 24FEB95 DH	B4129010 ~~H4319080~~ 24FEB95 DH		
11594041XM	0907	Total RCRA metals	125 mL WMG	G4339050		Site 2 PBF
11594042XM	0907	↓	↓	G4339050	↓	↓

24FEB95 DH

SAMPLE MATRIX

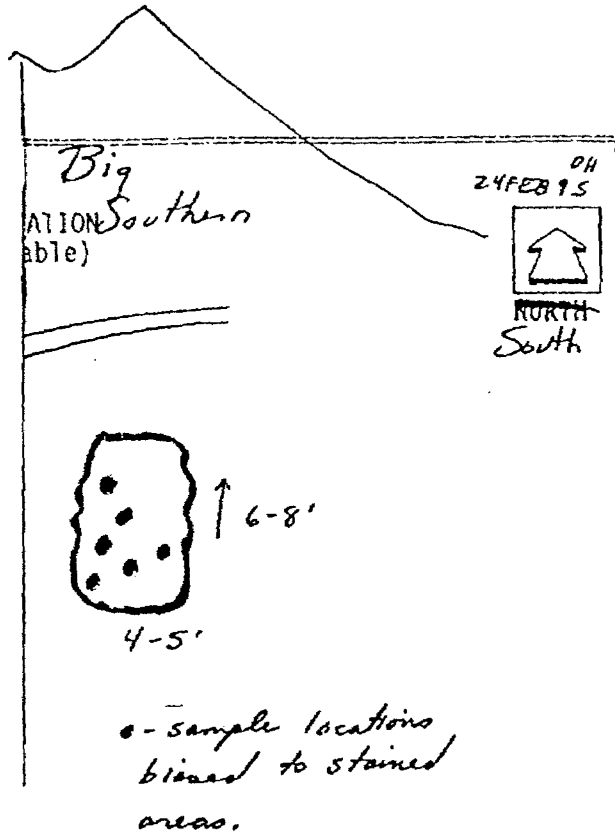
SOLID (X) LIQUID (__) SEDIMENT/SLUDGE (__)

Narrative description of the sampling event including any deviations from the sampling plan:

Continued from p. 193. Randy decons onsite, ~~scop~~ SCI scoop #SC5. Pack up + go to (Site #1) Sample area dimensions 2"×2"×4." At 1150, leave TRA-scoop job EMS-008-95 on next pages. Took awhile to get out - radon buildup on my sweater. We go to the diesel saturated pile of dirt, site #1. Arrive and hold prejob at 1200. The soiled areas are obvious and all samples will be biased to them. The soil has a definite petroleum^creosote smell; there is ~5% small pebbles; all samples will be collected right from surface until adequate volume is attained. A few chunks of metal were found, but not included in sample. Large stainless steel spoon used, "S8" Randy decons spoon + pan onsite.

Go to 196.

Site #1



195 narrative continued: Rinsate will be collected using di water. VOCs is collected off spoon only. Everything else is spoon & pan rinse. Collect trip blank using di water & place directly into cooler. Also, utilize funnel for rinsate. The funnel is # 300; the pan # P1. The pH on TPH is 2, using Litmus paper. All equipment put in storage pending results. These data will be a verification check on decon (rinsate) and filed in QC logbook, Temperature of cooler 5°C. Lab contact has been notified, of Saturday delivery. Packaged samples & delivered to Sheila Lints. Note to customer sent.

24FEB95
DH

RECORDED BY: [signature] READ AND UNDERSTOOD BY: R. Price

• Diesel Saturated Dirt Pile Near The S.W. side of the Experimental Field Station

Rec 11/29/94

EM5-115

SPECIAL REQUEST INFORMATION LOG

Customer: Bill Berka / Ted Hopkins
Customer phone/fax: 6-0305 / 6-4871
Charge number: 301125010
Date of request: 11/04/94
Date need completed by:

Data use (Landfill disposal, characterization, etc.): RCRA Corrective Action
Possible landfill disposal

Any previous sampling known: NO Site 1

Request (describe): Sampling of dirt pile to determine acceptability of landfill for disposal at CFA landfill

Media (Solid/Liquid – sample all phases?): Solid

List quality control requirements (duplicates, rinsates, etc.): STANDARD

Is validation required? (Level B is typical) YES

List analyses/methods and any special detection limits required: Sample per sample analysis guidance on Table 4.3.4-1 of the RBWAE. Use parameters for waste oil contaminants. (See attached copy)

- Is special equipment needed to access sample material – keys, ladders, wrenches, etc.?
- Is the sample location in a radiation, controlled or contaminated area?
- Is special personal protective equipment or training necessary?
- Is a radiological work permit or safe work permit required?
- Will industrial hygiene or radiological control coverage be required?
- If applicable, have outage requests and excavation permits been obtained?

If you need help completing this form, please contact Environmental Monitoring's Donna Haney (yhd) or Randy Rice (rr6) or call 6-4189l6-7050.

ABBREVIATED SAMPLING AND ANALYSIS PLAN FOR SAMPLING OF DISPOSAL PILES

1. INTRODUCTION

This Abbreviated Sampling and Analysis Plan (ASAP) will be used to perform sampling of two disposal piles located at the Idaho National Engineering Laboratory (INEL). The following is a list of key project personnel and corresponding responsibilities associated with the sampling activities to be performed under this ASAP.

Prepared by	D. Haney
Project Manager	J. Johnson
Field Team Leader	D. Haney
Alternate	R. Rice
Sampling Team	Environmental Monitoring (EM)
Laboratory Analysis	Radiation Measurements Laboratory (RML)

2. PROJECT DESCRIPTION

2.1 Background

Samples are being collected in response to Bill Becker's request for waste characterization. The disposal piles were identified during a recent aerial survey of the INEL. EM personnel were given a tour of the two sites on November 4, 1994. No known sampling has been performed at either site.

2.2 Objectives and Scope

The objective of this project is to provide technically representative sampling and analysis of sample material to determine proper disposal/treatment methods and to meet regulatory requirements. The sampling process is designed to address criteria for obtaining representative samples and maintaining sample quality and integrity, as well as safety considerations for field personnel.

2.3 Area Description

Site #1 is a pile located approximately 50-75 ft southwest of the Experimental Field Station dairy barn. The sample area is 2-3 ft high, 4-5 ft wide and 6-8 ft long. The site contains a darkly stained pile of dirt and gravel that smells strongly of diesel fuel. The source of the dirt is unknown, but did not originate from the dairy farm.

Site #2 is located in a construction rubble area approximately 500 ft south of the Power Burst Facility (PBF) 632 building. The sample area is a circle approximately 10 ft in diameter and consists of dark granular material. The material in question appears to be naturally occurring obsidian and basaltic grit that has, over time, accumulated and been removed from the bottom of well-water storage tanks at the facilities. The material constitutes no environmental or health risks in its present state.

No special notification or access requirements are applicable to these sample sites. The sites are not located in radiological or hazardous materials control areas.

2.4 Data Usage

The data will be used for Resource Conservation and Recovery Act (RCRA) corrective action decisions. Neither site meets the requirements for an inactive waste site and should not be included in the Federal Facilities Agreement/Consent Order (FFA/CO) Action Plan. Samples are required to confirm the absence of hazardous constituents. Any analyses other than those listed in this ASAP have been discounted based on process knowledge.

2.5 Data Types

For Site #1, the requester has asked that samples for the following analyses be collected: total petroleum hydrocarbons (TPH), polychlorinated biphenyls (PCBs), Toxicity Characteristic Leaching Procedure (TCLP) metals/semivolatile organic compounds (SVOCs) and TCLP volatile organic compounds (VOCs). For Site #2, the requester has asked that samples for the following analyses be collected: total metals.

Quality control (QC) samples are used as a check on field precision (duplicates), decontamination procedures (rinsates), ambient conditions (field blank) and transportation interferences (trip blanks). The requester has indicated that QC applicable to this project should include duplicate sets of all samples collected, a trip blank for site #1 samples, and a rinsate following collection of site #1 samples. Samples collected in support of this project will be submitted to ATI. The methods, bottles and preservation types are listed in the following table.

steel-toed shoes (PPE recommended)
work coveralls/Tyveks (PPE recommended)
radio (if available)
vehicle
compositing container
stainless steel spoon or scoop
Teriwipe™
pure water for QC samples - rinsate, trip blanks
decontamination material - tap water, distilled water, soap water
Cooler with blue ice
aluminum foil for deconned equipment

DOCUMENTATION:

Field logbooks and waterproof pens
training verification onsite
signed copy of the ASAP
Sample labels
applicable standard operating procedures (SOPs)
Chain of custody (COC) forms

Rinsate liquid 24FEB95 OH
bottles: 4
✓ 5 VOC/Metals 1 L Amber, 4°C
✓ VOCs - 2, 40 mL or 250 ml, 4°C
✓ PCBs, 3000 ml Amber, 4°C
✓ TPH - 1 L Amber
Extractable HCL pH < 2, 4°C

SAMPLE PREPARATION FOR SHIPPING/ANALYSIS:

Custody seals
Parafilm™
Clear tape
Shipping labels (fragile, environmental, this way up, addresses, arrows)
Strapping tape
Packing material (i.e. bubble wrap)

2.8 Sampling Design and Procedures

All equipment will be cleaned before use and decontamination materials will be available on site for decontamination of equipment after use. Immediately prior to sample collection, the sampling times will be recorded on the sample labels and the sampler will confirm that all information recorded on the sample label is complete and accurate.

Site #1: Based on information from the requester, samples at the diesel saturated dirt pile will be biased to those areas which are obviously contaminated with oil products. Regular and duplicate samples collected for VOC analyses will be collected first from visually identified areas on the surface and sides of the pile and will be placed directly from the transfer device into the sample bottles, without mixing. Regular and duplicate non-VOC samples will be chosen using the same method of visual inspection. Material will be placed into a compositing container until adequate volume has been attained to fill all non-VOC bottles. The sample material in the compositing container will be thoroughly mixed prior to

placing sample material into individual sample containers. A stainless steel spoon or scoop will be used to attain the samples. Detailed notes of the actual sample locations, depths, color of stain, etc., will be given in the sample logbook. Following sample collection, a rinsate will be collected for all the same analyses from the compositing container, the spoon or scoop used to attain the sample, and the mixing implement. A trip blank will accompany the samples from the time they are collected.

Site #2: Because this site appears to be homogeneous and very little sample volume is needed (250 mL), a random area will be chosen, sampled and noted in the sample logbook (depth of material, exact dimensions sampled, etc.). It is not known how "deep" the material is, and vertical sampling will stop when material other than the disposed sample material is encountered - expected to be at ~1 ft. The collection of samples should be performed as discussed under Site 1. At Site 2, special care should be taken to reduce inhalation of material. Keep any visible dust to a minimum.

It is not expected that any waste will be generated during sampling. The only equipment contacting the waste is the spoon, which will be decontaminated. However, if waste is generated, it will be placed in a plastic bag and labelled with the requester's name and phone number, project name, date sampled, and "Waste Awaiting Lab Results" and left onsite.

After sampling, containers will be checked against the corresponding COC for accuracy, then the labels will be covered with clear tape and bottle lids will be parafilmed. The COC and logbook should be completed as samples are collected.

The following standard operating procedures (SOPs) should be read and followed as applicable to this sampling effort: Environmental Monitoring Standard Practices (EMSP) 8.1, Environmental Monitoring Log-Keeping Practices; EMSP 8.2, Control of Quality Equipment and Materials; EMSP 8.3, Labelling Samples and Maintaining Chain of Custody; EMSP 13.1, Handling, Storing, and Shipping Samples; and SOP-EM-SR-1.6 Collection of Samples Using Scoops and Spoons. Decontamination procedures are detailed in Section 2.10.

Samples will be shipped as soon as possible to ATI accompanied by COC. Care will be taken to meet all holding times. The laboratory will be contacted for notification of delivery. Upon receipt of the samples, the laboratory will check for damage to the sample containers and check for discrepancies between the COC and sample label information. The laboratory sample receiving person will then sign the COC indicating receipt and transfer of custody of the samples. Any deviations from this plan must be noted in the appropriate field logbooks.

2.9 Sample Collection and Analysis

Sample Numbering Scheme: This format will complement the Sample Management Office's (SMO's) tracking system. The sample identification code will be discrete for each sample collected. Sample numbers will be designated as follows: The first three digits will

be "115" to indicate the EMS sampling plan being used. The next two digits are the year "94". The next two digits will be sequential "01, 02, . ." based on sample locations; the next digit will indicate if a sample is a regular sample "1" or a QC duplicate sample "2".

The final two digits specifically identify the analyses requested using the codes provided by the Statistics, Reliability and Analysis Unit. See the example ID following:

Example sample number: 11594012TV

This sample ID would indicate the sample number assigned to site #1 of the EMS-115-94 project. The code would indicate that the sample is a duplicate for TCLP VOCs analysis. The exact sample location will be noted in the sample log. The following samples are currently planned for this project:

Description	Sample IDs	Sample Analyses
Site 1:	11594011TP	TPH
	11594011PC	PCBs
	11594011TV	TCLP VOCs
	11594011TR	TCLP SVOCs/metals
Site 1: Duplicate	11594012TP	TPH
	11594012PC	PCBs
	11594012TV	TCLP VOCs
	11594012TR	TCLP SVOCs/metals
Site 1: QC Rinsate off spoon and compositing pan	11594021TP	TPH
	11594021PC	PCBs
	11594021TV	TCLP VOCs - spoon only
	11594021TR	TCLP SVOCs/metals
Site 1: QC trip blank	11594031TV	TCLP VOCs
Site 2:	11594041XM	Total RCRA Metals
Site 2: Duplicate	11594042XM	Total RCRA Metals

Site 004

2.10 Decontamination Procedures

To prevent cross-contamination, all sampling equipment that comes in contact with the waste material must be cleaned as follows:

1. Spray equipment with a nonphosphate detergent/water solution